PHASE I ARCHAEOLOGICAL SURVEY INVESTIGATION
WIGGINS MILL ROAD BRIDGE REPLACEMENT [BRIDGE #424]
APPOQUINIMINK HUNDRED, NEW CASTLE COUNTY, DELAWARE

DELDOT PROJECT 96-071-04 DELDOT ARCHAEOLOGICAL SERIES NO. 151

FHWA FEDERAL AID PROJECT EBROS-N446(1)

By

William Liebeknecht, Brian Seidel and Richard Hunter

HUNTER RESEARCH, INC.

Submitted To

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

and

DELAWARE DEPARTMENT OF STATE
Division of Historical and Cultural Affairs
State Historic Preservation Office

Prepared For

DELAWARE DEPARTMENT OF TRANSPORTATION
Division of Planning
Location and Environmental Studies Office

Eugene E. Abbott
Director of Planning

1996

ABSTRACT

Between April 18th to April 26, 1996, Hunter Research Inc. conducted a Phase I archaeological survey in conjunction with the Delaware Department of Transportation's proposed improvement of Wiggins Mill Road and replacement of Delaware State Bridge #424 in Townsend, Appoquinimink Hundred, New Castle County, Delaware. The project area consists of a corridor extending for 1,860 linear feet along and immediately adjacent to Road 446, a minor road that is also known locally as Wiggins Mill Road.
A total of 78 shovel tests and two one-meter-square excavation units were excavated. The survey identified two prehistoric activity areas and three historic sites (the site of Wiggin's Gristmill; the Davis/Townsend House Site; and the Wiggins Millpond Bridge/Delaware State Bridge #424) within or immediately adjacent to the project corridor.

Unless the project alignment can be modified slightly to avoid affecting the prehistoric activity area located to the south southeast of Delaware State Bridge 424 along the first terrace, Phase II-level archaeological investigation is recommended to further investigate this resource. No further work is recommended for the other prehistoric activity area located on the knoll located to the northwest of the bridge as use of the proposed construction limits will only result in the removal of approximately one to two feet of intact soils along the alignment in an area where archaeological deposits have already suffered extensive natural erosion. Both locations where prehistoric materials have been found should be excluded from any future consideration as potential staging area sites during construction.

The Wiggins Millpond Bridge (Delaware State Bridge #424) shows slight signs of rust and has been assessed to be in fair condition. The bridge has been also identified as an important historic engineering structure and, although several pony truss bridges still survive within the State of Delaware, few are as intact and unaltered as this example. If replacement of the span cannot be avoided. it is recommended that the bridge be offered to any responsible individual or institution that might be interested in relocating and preserving the structure.

The site of Wiggin's Gristmill appears to be archaeologically intact and retains reasonable integrity. While more detailed archaeological study would be required to fully evaluate this site, it should be considered potentially eligible for inclusion in the National Register of Historic Places as a locally significant industrial archaeological resource. The core of the site lies outside the project limits and does not appear to be threatened by the proposed road improvement and bridge replacement actions. It should be noted, however, that location of an early 19th-century saw mill referred to in period documents remains unknown and could conceivably lie closer to the project corridor. As for the prehistoric resources, the gristmill site (and the site of the Davis/Townsend House) should both, if possible, be excluded from consideration as potential staging areas during construction.

Richard W. Hunter
PRESIDENT

Ian C. Burrow
VICE PRESIDENT

PHASE I ARCHAEOLOGICAL SURVEY INVESTIGATIONS WIGGINS MILL ROAD BRIDGE REPLACEMENT [BRIDGE #424] APPOQUINIMINK HUNDRED, NEW CASTLE COUNTY, DELAWARE 96-071-04 EBROS-N446(1)

MANAGEMENT SUMMARY

A. Introduction

From April 18th to April 26, 1996 Hunter Research Inc. conducted a Phase I archaeological survey in connection with the proposed improvement of Wiggins Mill Road and the replacement of Delaware State Bridge #424 in Townsend, Appoquinimink Hundred, New Castle County, Delaware. The project area consists of a corridor extending for 1,860 linear feet along and immediately adjacent to Road 446, a minor road that is also known locally as Wiggins Mill Road (Figure 1). An unnamed tributary of the Appoquinimink River is spanned by Bridge #424 roughly mid-way along the project corridor.

B. Background Research

The background research undertaken as part of this survey identified four historic resources: 1). the site of Wiggin's Gristmill; 2). Wiggin's Millpond Bridge (Delaware State Bridge #424); 3). the site of the William M. Johnson House, a frame dwelling house on the mill property; and 4). the site of the Davis/Townsend House, a brick colonial dwelling. The history of each of these resources is briefly outlined below.

1. Wiggin's Grist Mill

The earliest documented reference to a mill building at the crossing of Wiggins Mill Road over this unnamed tributary of Appoquinimink River apparently occurs in a tax assessment of 1797 for Appoquinimink Hundred. In this assessment, William Williams is listed as owning 444 acres with a brick dwelling house (see below, the Davis/Townsend House), a log house, a kitchen, a mill and five outbuildings. The mill is also further mentioned in a conveyance of the property to the Reverend Joseph Whitby in 1813 (New Castle County Deed G-4 431). In that year Williams sold 504 acres, containing the mill and other buildings, to the Rev. Whitby for the sum of $7,805. Prior to the sale, this land had been divided into two farms, a 183-acre tract known as the "Mansion Farm" and a 321-acre tract known as the "Forest Farm." The deed of conveyance mentions that both a sawmill and gristmill were located on the "Mansion Farm" tract. The tax assessment list of 1816 shows Whitby owning 500 acres, a brick dwelling

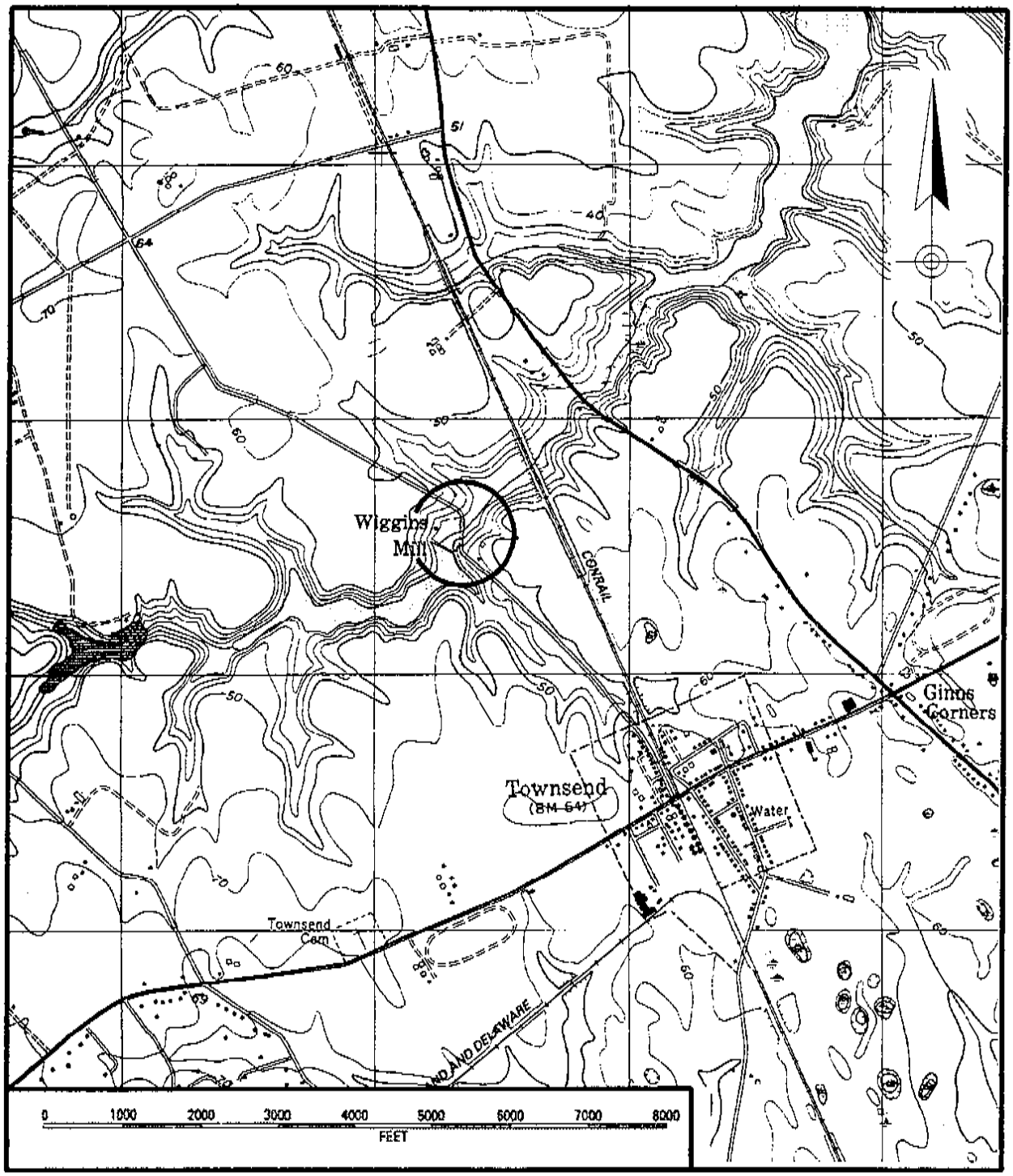


Figure 1. Location of Project Area (Circled). Source: USGS 7.5' Topographic Series, Middletown, DE. Quadrangle (1953 [Photorevised 1986]).

(possibly the Davis/Townsend house) and a single gristmill, suggesting that the sawmill was no longer in operation. All were valued at a total of $2,000. The tax assessment also lists him as owning three slaves, valued at $150. In the tax assessment of 1822 Whitby is listed as owning two properties, a 125-acre farm with a brick house and gristmill, valued at $700 and a 387 acre farm with a log house, valued at $580. In that same year Joseph Whitby died leaving his property to his son John Whitby (Appoquinimink Hundred Tax Ratable Assessments 1797, 1816, 1822).

John Whitby owned and operated the gristmill for the next 13 years. The tax assessment of 1828-34 lists him as owning 899 acres containing two brick houses and one barn valued at $6,238 (Appoquinimink Hundred Tax Ratable Assessments 1828-34). In 1835, Whitby sold 13 acres of his property, including the gristmill, to Garrett Othoson (New Castle County Deed W-4 420). In 1848, Othoson sold the mill property to Abel J. Porter (New Castle County Deed Z-5 230). It is in this deed that the first mention of the mill pond is made. Porter apparently increased the size of this pond in 1849 when, for $60, he purchased the right to flood three acres belonging to his neighbor, Alexander Crawford (New Castle County Deed C-6 115).

In 1850 Porter sold the mill property to Benjamin MacDaniel of Wilmington (New Castle County Deed F-6 416). The deed records the property as being 16.5 acres and indicates that the gristmill had been destroyed by a fire and was formerly known as the Williams or Whitby Mill. Sometime within the next four years MacDaniel is believed to have rebuilt the gristmill. The tax assessment of 1854 has MacDaniel listed as owning a four-acre tract of land containing a frame house and a gristmill, valued at $2,500. After the death of MacDaniel, which occurred in 1854, the property was seized for debts he owed and was sold to Joseph A. Hunter, a carriage maker from Wilmington (New Castle County Deed U-6 259).

Hunter owned the mill until 1859 and then sold it to Thomas Wright (New Castle County Deed G-7 302). At this date the mill property included five acres, a frame house, a gristmill and a frame stable. The tax assessment of 1857-61 lists Wright as owning a four-acre property with a frame house and gristmill valued at $2,500 (Appoquinimink Hundred Tax Ratable Assessments 1857-61). The population census of 1850 lists him as a 38-year-old constable. In the census of 1860 he is listed as a "Grist Miller" (Federal Census of Delaware, Population Schedules 1850, 1860). The census also records a John Lewis, aged 23 and a miller by occupation, as living with him. In 1864 Wright sold the mill property to John R. Lewis (New Castle County Deed V-7 426). In the following year, the heirs of Benjamin MacDaniel executed a quit claim to the entire 16.5-acre mill tract to Lewis (New Castle County Deed V-7 421).

In 1864 Lewis sold the 16.5-acre mill property to William M. Johnson (New Castle County Deed U-7 429). Johnson appears in the Beers Atlas of Delaware in 1868 (Figure 2) as the owner of a frame house and gristmill. He is also listed in the industrial census of 1870 as owning a gristmill valued at $4,000. The mill is described as having one water wheel and two burrs capable of processing ten bushels a day. The production for the immediately preceding year was 4,000 bushels of flour, 3,500 bushels of meal and 1,200 bushels of alfalfa (Federal Census of Delaware, Industrial Schedules 1870).

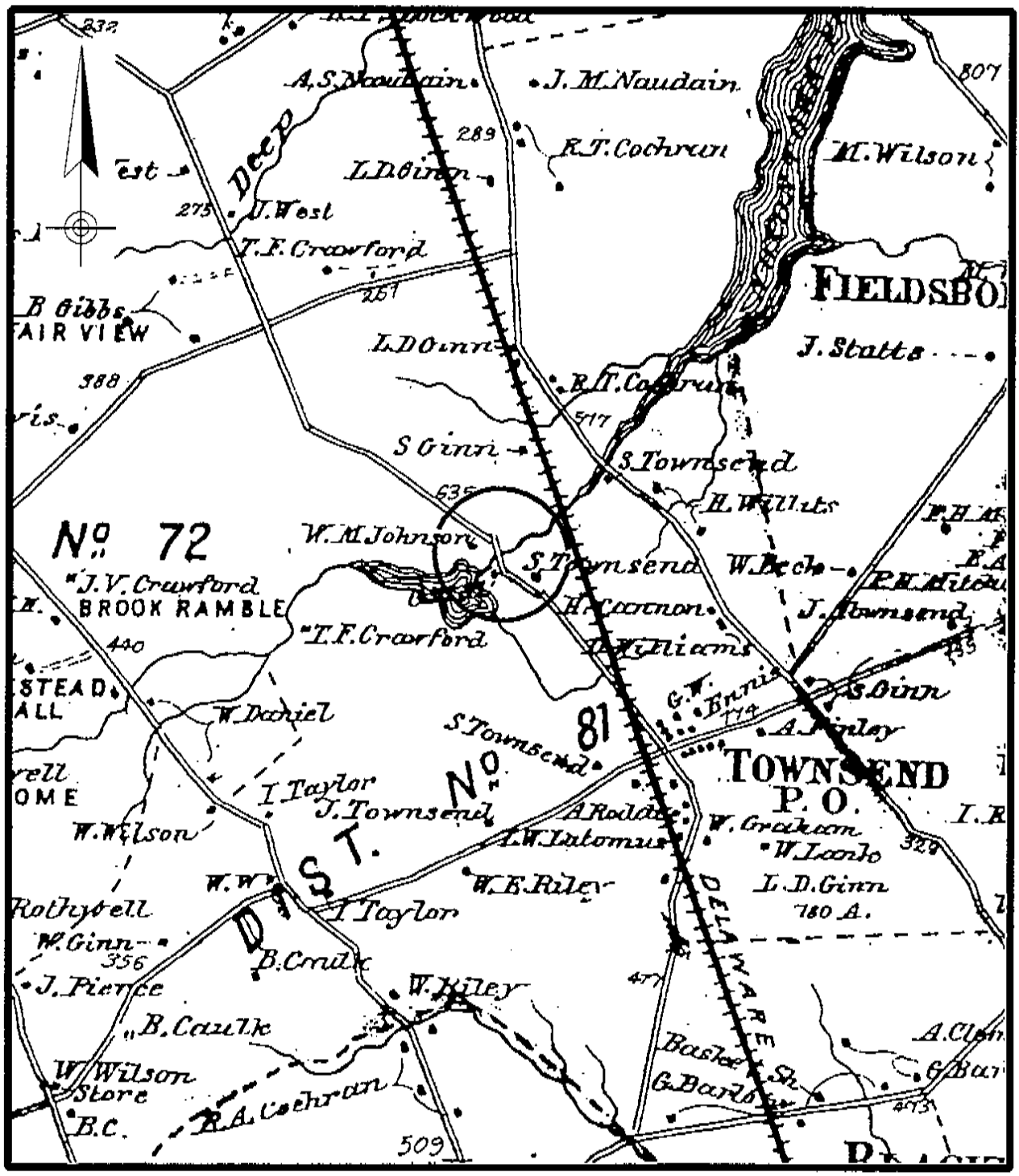


Figure 2. Beers, D.G. Atlas of the State of Delaware. Appoquinimink Hundred. 1868. Scale 1 inch: ½ mile. Project Area Circled.

In 1871, Johnson sold the mill property to Israel Allston Harmon (New Castle County Deed L-9 317). The industrial census of 1880 describes the mill as having an average daily production of 85 bushels. It produced 606 barrels of flour, 338,040 lbs. of corn meal and 54,940 lbs. of feed. The water wheel is described as being 11 feet in breadth, of overshot type, and capable of generating 15 horse power (Federal Census of Delaware, Industrial Schedules 1880).

Scharf's History of Delaware, published in 1888, gives the following reference to Wiggin's Gristmill which roughly confirms and slightly expands on the history established from the chain of title: "The earliest record of the mill now owned by I.A. Harmon is found on the assessment list of 1816, when it was the property of Joseph Whitby, who was a large land owner in the vicinity of the mill. At his death the mill passed to his son, John, who operated it for some time, and then sold it to Garret Ottison. It was afterwards owned by --- Hunter, who sold it to ---McDaniel, by whom it was repaired and generally improved. The mill was next owned respectively by John Lewis and William Johnson, by whom it was conveyed to the present owner. It was a two-story frame building, situated a mile north of Townsend. It was fitted up with burrs, and grinds custom work exclusively" (Scharf 1888:1023).

In 1915, Israel Harmon sold the mill property to George Wiggin (New Castle County Deed L-25 188). The deed of conveyance refers to the mill dam as Harmon's Dam. Wiggin owned the property for the next 14 years. In 1928, he sold it to Robert Moore (New Castle County Deed V-35 559).

Proposed road improvement plans (not illustrated) for Road 446/Wiggins Mill Road dating to 1938 show the mill building with an attached porch owned by F.W. Pickard. A small shed is depicted to the east of the mill building. It is not known when the mill stopped operating and was eventually torn down, although it is reported that about ten years ago the Hagley Museum acquired the "wheel" of the mill and moved it to the museum's property (George Schreppler 1996: personal communication).

2. Wiggin's Millpond Bridge (Delaware State Bridge 424)

This bridge was examined by the Delaware Historic Bridges Survey conducted by P.A.C. Spero & Company in 1991. The survey describes the bridge as being a single span riveted Warren Pony Truss type, 34 feet in length and 14.5 feet in width. The southwest wing wall is inscribed "Rebuilt 1884" by "J.T. Taylor, L.C. Com." The superstructure was constructed by the Edge Moor Bridge Works of Wilmington, Delaware (P.A.C. Spero & Company 1991:54). The report gives no indication about the type of bridge that this one replaced. The bridge has been recorded by the Delaware State Historic Preservation Office as Cultural Resource Site N-4303.

3. William M. Johnson House Site

The Beers Atlas of Delaware published in 1868 (Figure 2) shows a house belonging to W.M. Johnson on the northwest side of present Road 446. This building which consisted of a frame house was associated with Wiggin's Gristmill starting around the second half of the 19th century. The earliest reference to a frame house on the mill property is in the tax assessment of Appoquinimink Hundred in 1854. Benjamin MacDaniel, the owner of the mill from 1850-1854 is listed in this tax record as owning a frame house and a gristmill valued at $2,500 (Appoquinimink Hundred Tax Ratable Assessments 1854). The Rea and Price map of New Castle County in 1849 (not illustrated) does not show any house in this area indicating that the building was constructed sometime between 1849 and 1854. William M. Johnson was the owner of the gristmill from 1864 until 1871. MacDaniel most likely is responsible for the house's construction. The first mention of this house in the deed records is in the 1928 transfer between the widow Wiggin and Robert Moore (New Castle County Deed V-35 559). This deed mentions a frame house as well as the gristmill and milldam. Today, a house owned by the Schreppler family is located on the site of the former William M. Johnson House.

4. Davis/Townsend House Site

The exact date for the construction of the Davis/Townsend House remains unclear. The tax assessment of 1797 for the property of William Williams alludes to the presence of a brick house on the Wiggin's Mill property (Appoquinimink Hundred Tax Ratable Assessments 1797). Similarly, a brick house on the "Mansion Farm" is one of the properties conveyed by William Williams to Joseph Whitby in 1813 (New Castle County Deed G-4 431).

In 1837 John Whitby sold 217 acres containing a plantation to Thomas Davis (New Castle County Deed B-5 203) for $3,250. Eighteen years later, in 1855, Davis sold the same property to Samuel Townsend (New Castle County Deed S-6 184) for the sum of $10,000. The Beers Atlas of 1868 (Figure 2) labels the house at this location with "S. Townsend." After the death of Samuel Townsend, which occurred in 1881, his son, Samuel Townsend inherited the property (New Castle County Will Book F-2 320). Proposed road improvement plans dating to 1938 (not illustrated) show that the Davis/Townsend House consisted of a two-story L-shaped brick building. The property included a barn and an open rectangular shed. The house and property remained in the Townsend family until 1964 when it was sold to Ruth Vogel of Wilmington (New Castle County Deed Z-73 557).

In 1977, the house was recorded by the Delaware State Historic Preservation Office as Cultural Resource Site N-102. It is described as "a Colonial brick house in disrepair but amazingly authentic." According to the site form, the building had never been fitted with electrical service or plumbing. A photograph accompanying the site form shows the house as it existed during the recording of the site. Sometime within the last ten years the house was torn down.

C. Field Investigations

1. Field Methods

A total of 78 shovel tests and two one-meter-square excavation units were excavated in advance of the proposed replacement of Delaware State Bridge #424 along Wiggins Mill Road (Figure 3). A testing interval of 25 feet was employed between shovel tests within the limits of construction. Ten of the 78 shovel tests (ST#s 69-78) and the two excavation units (EU#s 1 and 2) were located outside of the limits of construction, to the south of the bridge, in the area of Wiggin's Grist Mill. All tests were excavated by hand and screened through 1/4-inch mesh hardware cloth (Appendix A).

2. Prehistoric Resources

No prehistoric features were found within the limits of the project corridor. Minor clusters of artifacts suggesting a possible occupational level were noted in two locations. The first area is located on an eroded knoll along the south side of the road northwest of Delaware State Bridge #424 between two dirt driveways (ST#s 4-7, 9 and 11). This area was originally cut for the construction of the road and has since been widened and become unstable through erosion. This activity area more than likely continues south along the east side of the knoll. The second area is located near the gristmill building on the original first terrace of the stream south southeast of Delaware State Bridge 424 (ST#s 25, 26, 30 and 31). This activity area may very well continue south outside of the proposed construction limits along the first terrace up to the earthen dam constructed to create the mill pond.

3. Historic Resources

The Davis/Townsend House Site and Wiggin's Gristmill properties extend up to the current edge of the road pavement, but no cultural features or concentrations of historic artifacts were encountered within the proposed limits of construction.

Outside the proposed limit of construction historic vegetation was evident and plentiful around the site of the former Davis/Townsend House. No shovel testing was conducted outside the limits of construction at this location. At the former gristmill site no historic vegetation remains as the area is currently occupied by well manicured grasses. A depression outlined by fragments of stone foundation wall helped locate the site of the former mill building. Shovel Tests 70-74 successfully located traces of the former main mill building. Shovel Test 74 came directly down onto the former north wall of the foundation. Excavation Units 1 and 2 incorporated Shovel Test 74 and were situated adjacent to one another to form a trench straddling the main northwest exterior wall of the mill building (Figure 4).

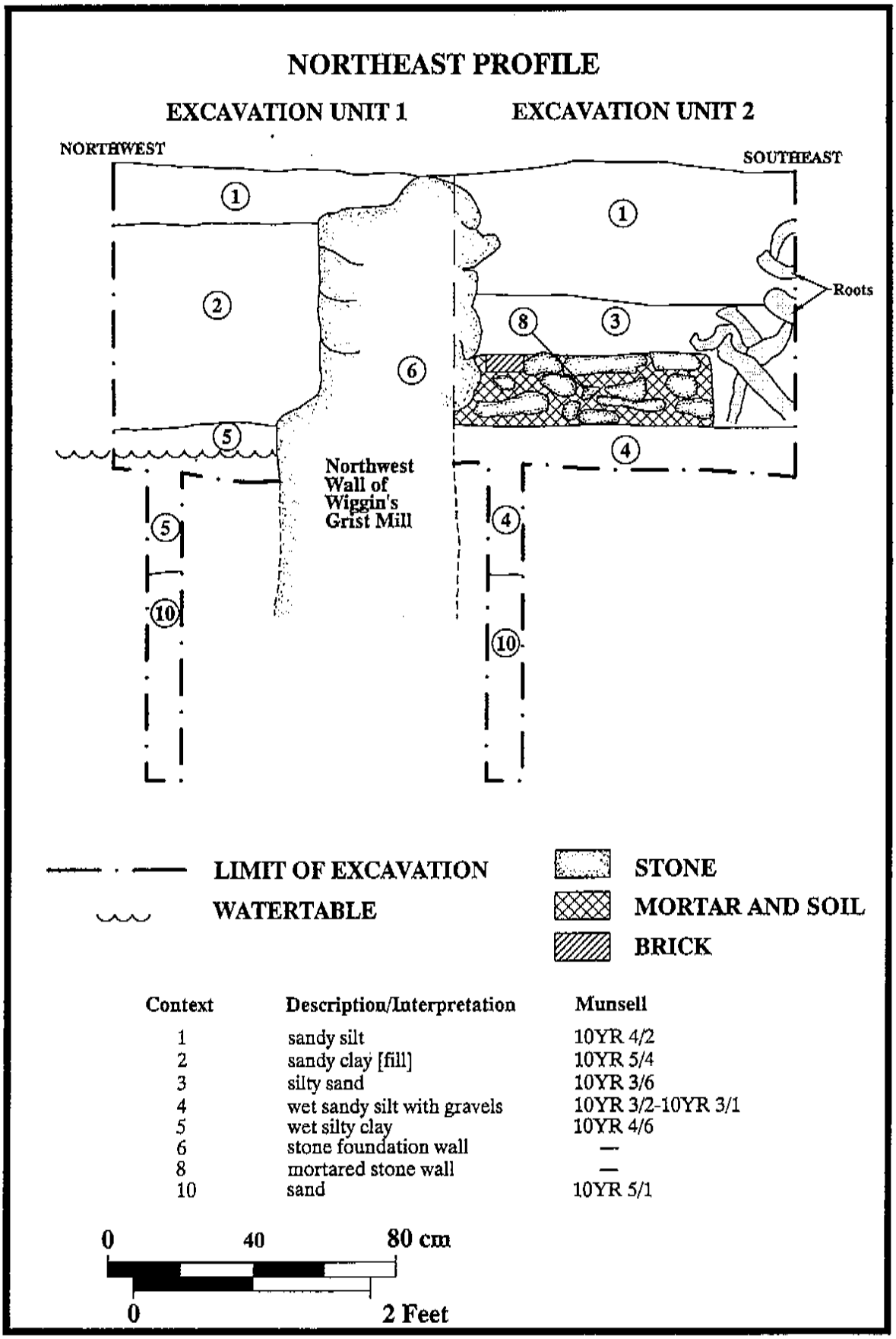
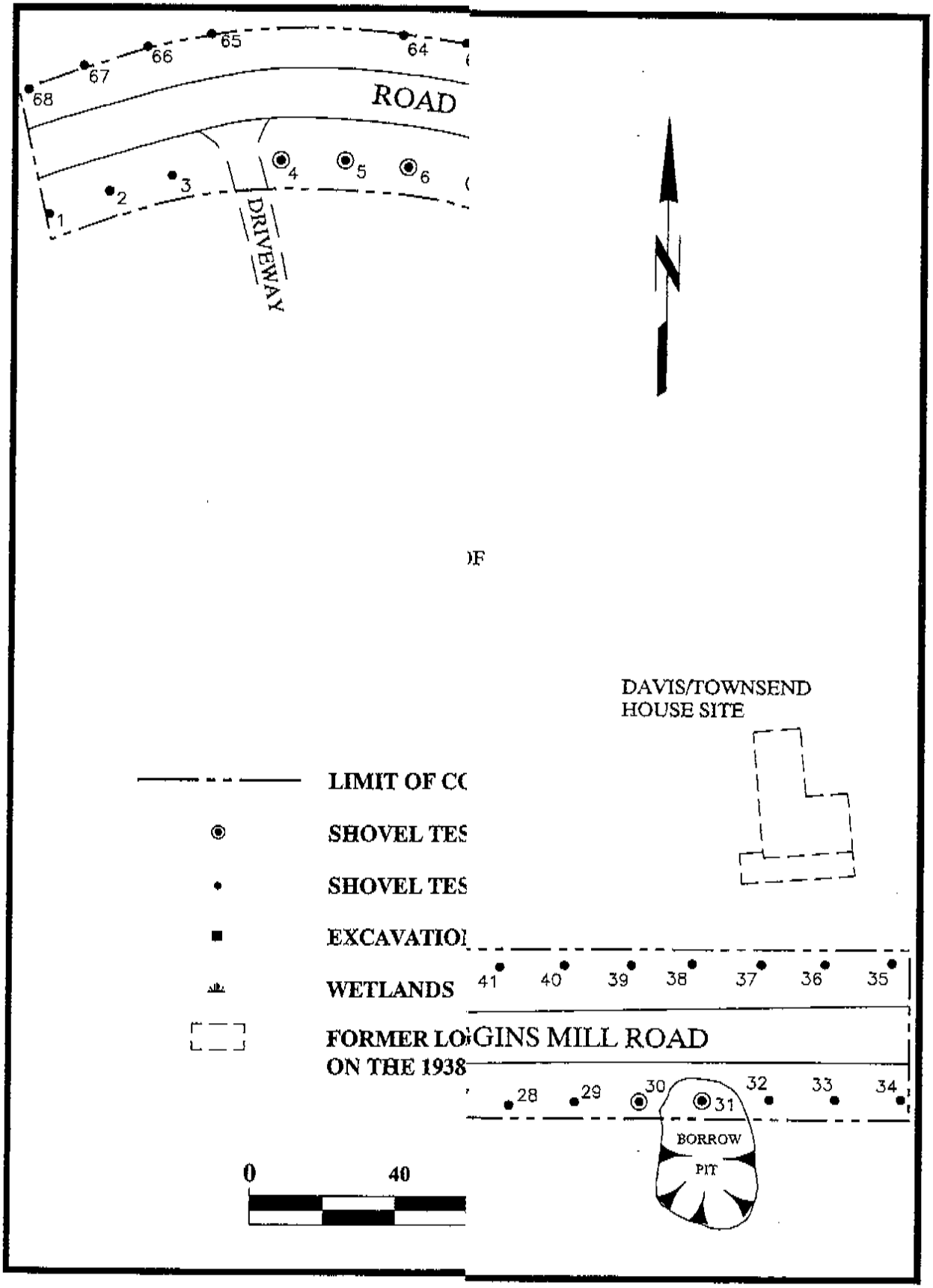


Figure 4. Excavation Units 1 and 2, Northeast Profiles.


ROAD
DRIVEWAY
DAVIS/TOWNSEND
HOUSE SITE
LIMIT OF C(
SHOVEL TES
SHOVEL TES
EXCAVATIO
WETLANDS
FORMER LO
ON THE 1938
GINS MILL ROAD
BORROW
PIT
0
40

Excavation Unit 1 (Figure 4)

Excavation Unit 1 was manually excavated to a depth of 90 centimeters below the ground surface and was extended five centimeters below the existing water table into a silty clay sediment [context 5]. This context contained various artifacts associated with the milling process, including heavily corroded fragments of iron hardware and a piece of leather belting that was most likely used to transmit power to some form of machinery in the mill interior (e.g., threshing or sifting equipment). A four-inch bucket auger was employed to explore the lower sediments within the unit below the silty clay [5]. Below context 5 was an undisturbed sterile sandy alluvial deposits [10] at 120 centimeters below the ground surface. Context 5 abutted the outside of the northwest wall [6] of the mill foundation. Overlying the silty clay sediment [5] was a post-occupational, culturally sterile fill deposit of sandy clay [2]. Context 2 was capped by a sandy silt deposit [1] which was derived from the surrounding ground and used for leveling after the structure was demolished around 1940.

Excavation Unit 2 (Figure 4)

Excavation Unit 2 was also manually excavated to a depth of 90 centimeters below the ground surface into a sandy silt with gravel and organic materials [4]. Artifacts recovered from this level, such as a stoneware and redware drainage pipes, suggest an attempt at controlling the amount of water inside of the foundation. The presence of a burned piece of wood may also be evidence of a fire. A four-inch bucket auger was employed to explore the lower sediments within the unit below the sandy silt [4]. Below Context 4 was an undisturbed sterile sandy alluvial deposit [10] at 120 centimeters below the ground surface (as there was in Excavation Unit 1). Context 4 abutted the inside of the northwest wall of the foundation wall [6] of the mill. A stone wall with mortar [8] partially overlay context 4 and abutted context 6. This wall appears to be a later structural element, possibly inserted following a fire at the mill in the early 1850s to support new or more modern machinery. The remaining portions of contexts 4 and 8 were covered by a sterile silty sand [3] which was used to partially fill in the foundation following the removal of the superstructure. The remaining void was filled with a sandy silt deposit [1] and was presumably intended to level the area, as was noted in Excavation Unit 1.

D. Artifact Analysis

1. Prehistoric Artifacts

A total of 56 prehistoric artifacts consisting of thermally fractured rocks (32), debitage (23) and a single chert core were recovered from 12 shovel tests (ST#s 4-7, 9, 11, 25, 26, 30, 31 and 42) (Appendix B). No diagnostic artifacts were recovered which might indicate a particular cultural or temporal period within the region. All of the artifacts were manufactured from local raw materials such as quartz, pebble chert and pebble jasper.

2. Historic Artifacts

A variety of mid- to late-19th century artifacts were recovered from the uppermost contexts of most of the shovel tests. These artifacts consist mostly of fragments of curved vessel glass, ceramics sherds, and cut nails, and reflect an ongoing domestic presence in the area. Artifacts relating to the gristmill consisted of a leather belt/strap, a cast iron drive pulley, large wheel fragments, and a variety of large cast iron fragments assumed to be of industrial origin.

E. Conclusions and Recommendations

This Phase I archaeological survey has identified two prehistoric activity areas and three historic sites (the site of Wiggin's Gristmill; the Davis/Townsend House Site; and the Wiggins Millpond Bridge/Delaware State Bridge #424) within or immediately adjacent to the project corridor.

Unless the project alignment can be modified slightly to avoid affecting the prehistoric activity area located to the south southeast of Delaware State Bridge 424 along the first terrace, Phase II-level archaeological investigation is recommended to further investigate this resource. This work should be restricted within the limits of likely project impact and should specifically aim to establish whether intact prehistoric features survive along the road edge. No further work is recommended for the other prehistoric activity area located on the knoll located to the northwest of the bridge as use of the proposed construction limits will only result in the removal of approximately one to two feet of intact soils along the alignment in an area where archaeological deposits have already suffered extensive natural erosion. Both locations where prehistoric materials have been found should be excluded from any future consideration as potential staging area sites during construction.

The Wiggins Millpond Bridge (Delaware State Bridge #424) shows slight signs of rust and has been assessed to be in fair condition. The bridge has been also identified as an important historic engineering structure and, although several pony truss bridges still survive within the State of Delaware, few are as intact and unaltered as this example. If replacement of the span cannot be avoided, it is recommended that the bridge be offered to any responsible individual or institution that might be interested in relocating and preserving the structure.

The site of Wiggin's Gristmill appears to be archaeologically intact and retains reasonable integrity. While more detailed archaeological study would be required to fully evaluate this site, it can be considered as potentially eligible for inclusion in the National Register of Historic Places as a locally significant industrial archaeological resource. The core of the site lies outside the project limits and does not appear to be threatened by the proposed road improvement and bridge replacement actions. It should be noted, however, that site of the sawmill referenced in early 19th-century documents remains unknown and could conceivably lie closer to the project corridor. As for the prehistoric resources, the gristmill site (and the site of the Davis/Townsend House) should both, if possible, be excluded from consideration as potential staging areas during construction.

REFERENCES

Appoquinimink Hundred Tax Ratable Assessments

1797 On file, Delaware State Archives, Dover, Delaware.

1816 On file, Delaware State Archives, Dover, Delaware.

1822 On file, Delaware State Archives, Dover, Delaware.

1828-1834 On file, Delaware State Archives, Dover, Delaware.

1854 On file, Delaware State Archives, Dover, Delaware.

Beers, D. G.

1868 Atlas of the State of Delaware. Pomeroy & Beers, Philadelphia, Pennsylvania.

Federal Census of Delaware

1850 Population Schedules. On file, Delaware State Archives, Dover, Delaware.

1860 Population Schedules. On file, Delaware State Archives, Dover, Delaware.

1870 Industrial Schedules. On file, Delaware State Archives, Dover, Delaware.

1880 Industrial Schedules. On file, Delaware State Archives, Dover, Delaware.

New Castle County Courthouse

n.d New Castle County Wills. New Castle County Courthouse,Wilmington, Delaware.

n.d. New Castle County Deeds. New Castle County Courthouse, Wilmington, Delaware.

P.A.C. Spero & Company

1991 Delaware Historic Bridges Survey and Evaluation: Delaware Department of Transportation Historic Architecture and Engineering Series No. 89. On file, Delaware State Historic Preservation Office, Dover, Delaware.

Rea, S. M., and J. Price

1849 Map of New Castle County, Delaware. Smith & Wistar, Philadelphia, Pennsylvania.

Scharf, J. T.
1888 History of Delaware 1609-1888. R. G. Richards and Co., Philadelphia, Pennsylvania.

APPENDIX A

SUMMARY OF SUBSURFACE TESTING

APPENDIX A

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
1	1	0-28cm	silty clay w/gravel; plowzone	10YR 4/4	-
	2	28-60cm	silty clay w/gravel; E-horizon	10YR 5/6	-
	3	60-80cm	sandy silt w/gravel; B-horizon	7.5YR 5/6	-
	4	80-93cm	silty sand w/gravel; C-horizon	10YR 5/8	-
2	1	0-30cm	loam; plowzone	10YR 3/2	-
	2	30-78cm	sandy loam; E-horizon	10YR 5/4	-
	3	78-100cm	sandy clay; B-horizon	10YR 5/6	-
	4	100-117cm	medium sand w/pea gravel; C-horizon	7.5YR 5/6	-
3	1	0-23cm	loam; plowzone	10YR 3/2	glass*; fauna*
	2	23-47cm	sandy loam; E-horizon	10YR 5/4	-
	3	47-93cm	sandy clay; B-horizon	10YR 5/6	-
	4	93-101cm	medium sand w/pea gravel; C-horizon	7.5YR 5/6	-
4	1	0-12cm	silty loam; plowzone	10YR 3/3	-
	2	12-40cm	silty loam; E-horizon	10YR 4/6	prehistoric lithics
	3	40-90cm	clayey silt; B-horizon	10YR 5/6	prehistoric lithics; energy*
	4	90-105cm	mottled sand/clay; C-horizon	10YR 6/6 10YR 5/8	-
5	1	0-10cm	silty loam; plowzone	10YR 4/2	-
	2	10-36cm	sandy silt; old plowzone	10YR 4/3	historic ceramic; prehistoric lithic
	3	36-60cm	sandy silt; E-horizon	10YR 4/4	-
	4	60-83cm	sandy clay; B-horizon	10YR 5/6	prehistoric lithics
	5	83-100cm	mottled sand; C-horizon	10YR 6/4 10YR 6/6	-
6	1	0-12cm	silty loam; plowzone	10YR 3/3	prehistoric lithic; historic ceramic; building material*
	2	12-41cm	sandy silt; E-horizon	10YR 5/4	prehistoric lithics
	3	41-82cm	silty clay; B-horizon	10YR 5/6	-
	4	82-90cm	silty clay w/medium gravel; C-horizon	10YR 6/6	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
7	1	0-20cm	silt; plowzone	10YR 3/3	prehistoric lithic
	2	20-40cm	sand w/gravel; E-horizon	10YR 4/4	prehistoric lithics; building materials
	3	40-55cm	silty clay; B-horizon	10YR 5/8	-
8	1	0-18cm	silty loam	10YR 3/2	-
	2	18-80cm	silty sand	10YR 4/6	-
	3	80-104cm	medium sand w/gravel	7.5YR 5/6	-
9	1	0-11cm	silt; plowzone	10YR 3/3	-
	2	11-40cm	sandy silt; E-horizon	10YR 4/3	building material; metal
	3	40-87cm	slightly sandy silt; B-horizon	10YR 4/6	prehistoric lithics
	4	87-97cm	sand w/gravel; C-horizon	7.5YR 5/4	-
10	1	0-17cm	silty loam	10YR 3/2	historic ceramic
	2	17-37cm	silty sand	10YR 5/4	building material*; glass*
	3	37-80cm	medium sand w/gravel	7.5YR 5/6	-
11	1	0-11cm	silt; plowzone	10YR3/3	-
	2	11-26cm	silty sand; E-horizon	10YR 4/4	-
	3	26-57cm	silty sand w/ gravel; B-horizon	7.5YR5/6	glass; building materials
	4	57-65cm	sand w/gravel; C-horizon	7.5YR 5/4	-
12	1	0-24cm	silty loam	10YR 2/2	-
	2	24-39cm	mottled loam; fill	10YR 5/4 10YR 4/2	plastic*
	3	39-70cm	medium sand	10YR 5/6	-
13	1	0-22cm	silty loam	10YR 2/2	-
	2	22-35cm	mottled loam	10YR 2/2	-
	3	35-76cm	medium sand	10YR 5/4 10YR 4/2	-
	4	76-118cm	clay	10YR 6/3	-
14	1	0-17cm	silty clay; plowzone	10YR 3/3	prehistoric lithics; glass; building materials; energy*
	2	17-50cm	silty clay w/gravel	10YR 5/4	energy*
15	1	0-30cm	silty loam	10YR 3/2	-
	2	30-47cm	medium sand	10YR 5/6	energy*

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
16	1	0-10cm	sandy silt	10YR 4/3	glass*
	2	10-50cm	mottled sandy clay	5YR 4/3 10YR 4/3 10YR 5/2 7.5YR 5/6 10YR 3/2	-
	3	50-60cm	sandy silt	5Y 3/2	-
	4	60-100cm	sandy silt	2.5YR 3/3	-
	5	100-165cm	sand	10YR 5/6	-
17	1	0-22cm	silty loam	10YR 3/2	prehistoric lithic; historic ceramic; glass*
	2	22-51cm	sandy loam	10YR 5/6	-
	3	51-82cm	medium sand	10YR 6/6	-
18	1	0-20cm	sandy loam	10YR 3/3	plastic*
	2	20-50cm	clayey sand w/pea gravel	10YR 4/5	-
	3	50-100cm	mottled medium sand w/pea gravel	10YR 3/6 7.5YR 4/5	-
19	1	0-48cm	mottled sandy silt w/some clayey silt	10YR 4/3 10YR 5/4 10YR 3/1	glass*; building materials*
	2	48-63cm	mottled medium sand w/pea gravel	10YR 3/6 7.5YR 4/5	-
20	1	0-15cm	sandy loam	10YR 4/3	-
	2	15-70cm	mottled sandy loam	10YR 6/4 10YR 4/2 10YR 4/6	-
	3	70-157cm	medium/fine sand	5YR 4/4	-
21	1	0-7cm	silty loam; humus	10YR 3/3	metal*; plastic*
	2	7-35cm	mottled medium sand w/some clay w/gravel	10YR 5/4 10YR 4/4 10YR 3/6	-
	3	35-59cm	mottled medium sand	7.5YR 3/4 7.5YR 5/6	-
22	1	0-22cm	mottled medium sand; fill	10YR 4/4 10YR 5/6; 10YR 4/2	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
23	1	0-15cm	clayey loam	10YR 4/2	ceramic*; building material*
	2	15-92cm	clayey sand w/gravel	10YR 4/6	building materials*
24	1	0-16cm	silty loam	10YR 3/2	-
	2	16-38cm	mottled sandy clay	10YR 6/6 10YR 5/4	glass*; metal*
	3	38-62cm	sandy loam	10YR 4/3	-
	4	62-102cm	medium sand	5YR 3/4	-
25	1	0-15cm	silty loam	10YR 3/2	-
	2	15-35cm	mottled sandy clay	10YR 6/6 10YR 5/4	prehistoric lithic
	3	35-60cm	sandy clay	10YR 5/8	-
	4	60-80cm	mottled silt w/pea gravel	10YR 6/2 10YR 5/4	-
26	1	0-12cm	silty loam	10YR 3/3	-
	2	12-59cm	sandy silt	10YR 5/4	prehistoric lithics
	3	59-89cm	silty clay	10YR 5/8	-
	4	89-128cm	mottled silty clay	10YR 6/3 10YR 5/8	-
27	1	0-24cm	mottled sandy clay	10YR 6/6 10YR 5/4	plastic*; glass*
	2	24-51cm	sandy clay	10YR 5/8	-
	3	51-79cm	silt w/pea gravel	10YR 6/4	-
28	1	0-2cm	silty loam	10YR 3/3	-
	2	2-10cm	silty sand	10YR 5/4	-
	3	10-49cm	silty clay	10YR 5/8	-
	4	49-80cm	mottled silty clay	10YR 6/3 10YR 5/8	-
29	1	0-15cm	silty loam	10YR 3/2	glass*
	2	15-27cm	sandy clay	10YR 5/6	-
	3	27-47cm	clay w/abundant pea gravel	10YR 6/6	-
30	1	0-7cm	silty loam	10YR 3/3	-
	2	7-35cm	clayey silt	10YR 4/3	historic ceramic; prehistoric lithic
	3	35-60cm	clay w/gravel	10YR 5/7	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
31	1	0-10cm	silty loam	10YR 3/2	-
	2	10-130cm	clayey loam	10YR 4/6	historic ceramic; prehistoric lithic; metal; glass*; plastic*
	3	130-141cm	clay w/pea gravel	10YR 5/6	-
32	1	0-7cm	silty loam	10YR 3/3	-
	2	7-15cm	silty loam	10YR 4/3	historic ceramic
	3	15-37cm	sandy clay w/gravel	10YR 5/6	-
	4	37-53cm	clayey sand w/gravel	10YR 5/6	-
33	1	0-25cm	silty loam	10YR 3/2	historic ceramic; building material; glass*
	2	25-49cm	sandy clay	10YR 6/6	-
	3	49-69cm	clay w/pea gravel	10YR 5/6	-
34	1	0-10cm	silty loam	10YR 3/3	glass*; building material*; plastic*
	2	10-33cm	silty loam	10YR 5/3	glass*
	3	33-68cm	clay w/some silty sand w/gravel	10YR 5/8	glass*
35	1	0-22cm	silty loam	10YR 4/3	energy*; building material*
	2	22-48cm	clayey loam	10YR 5/3	historic ceramic; glass
	3	48-84cm	sandy clay	10YR 5/8	-
	4	84-94cm	compact clay	10YR 6/6	-
36	1	0-17cm	silty loam	10YR 4/3	-
	2	17-37cm	clayey loam	10YR 5/3	historic ceramics
	3	37-71cm	sandy clay	10YR 5/8	-
	4	71-81cm	compact clay	10YR 6/6	-
37	1	0-30cm	silty sandy loam	10YR 2/1	glass*; building material*
	2	30-50cm	clay	10YR 5/6	-
	3	50-77cm	clayey sand w/gravel	10YR 5/8	-
38	1	0-7cm	silty loam	10YR 3/2	-
	2	7-23cm	silty loam	10YR 4/3	building materials*
	3	23-50cm	mottled silty clay w/gravel	2.5Y 5/4 10YR 4/6; 10YR 5/8	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
39	1	0-6cm	pressed granite driveway	-	-
	2	6-60cm	clay w/gravel	10YR 6/8	-
40	1	0-14cm	silty clay w/gravel; plowzone	10YR 3/3	building material*
	2	14-42cm	silty clay w/gravel	10YR 5/4	-
41	1	0-36cm	loamy sandy clay	10YR 3/2	glass; historic ceramics
	2	36-60cm	clay w/gravel	10YR 4/6	-
42	1	0-25cm	silty loam; plowzone	10YR 3/2	historic ceramic; building materials; building material*
	2	25-35cm	mottled silty clay w/gravel; E-Horizon	10YR 4/3 10YR 5/6	prehistoric lithic; building material*
	3	35-60cm	sandy clay; B-horizon	10YR 5/6	-
	4	60-72cm	sand/clay w/gravel; C-horizon	10YR 6/8 10YR 5/8; 10 YR 6/3	-
43	1	0-8cm	loamy sandy clay; A-horizon	10YR 3/2	-
	2	8-24cm	silty sand; E-horizon/B-horizon	10YR 3/5	-
	3	24-47cm	clay w/gravel; C-horizon	10YR 6/4	-
44	1	0-10cm	clayey loam; A-horizon	10YR 4/3	-
	2	10-50cm	clayey silt (feature fill)	10YR 5/3	fauna; building material
	3	50-60cm	clay w/gravel; C-horizon	10YR 5/6	-
45	1	0-5cm	silty loam; plowzone	10YR 3/3	historic ceramic; building material*
	2	5-12cm	silty clay; E-horizon	10YR 4/3	-
	3	12-33cm	silty clay; B-horizon	10YR 5/4	-
	4	33-110cm	mottled compact silt; C-horizon	10YR 6/6 10YR 6/2	-
	5	110-125cm	clayey sand	10YR 5/8	-
	6	125-139cm	sand	10YR 5/6	-
46	1	0-9cm	sandy silt; A-horizon	10YR 4/2	-
	2	9-33cm	sandy silt; old plowzone	10YR 5/4	building material; building material*
	3	33-46cm	sandy clay w/gravel	10YR 5/5	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
47	1	0-6cm	clayey silty sand; A-horizon	10YR 3/2	-
	2	6-20cm	clayey silty sand; E-horizon or old plowzone	10YR 5/3	-
	3	20-55cm	clay w/gravel	10YR 5/4	-
48	1	0-8cm	clayey sand; A-horizon	10YR 3.5/2	-
	2	8-33cm	clayey sand; plowzone	10YR 4.5/4	building material; building material*
	3	33-55cm	clayey sand; B-horizon	10YR 5/5	-
	4	55-90cm	clay w/gravel; C-horizon	10YR 5/6	-
49	1	0-17cm	silty loam; plowzone	10YR 3/3	-
	2	17-30cm	silty clay; E-horizon	10YR 4/3	building material*
	3	30-60cm	clayey silt; B-horizon	10YR 5/4	-
	4	60-90cm	mottled compact silt; C-horizon	10YR 6/6 10YR 6/2	-
50	1	0-10cm	loamy sandy clay; A-horizon	10YR 3/3	building material*
	2	10-50cm	clay w/gravel; C-horizon	10YR 5/6	-
51	1	0-7cm	silty loam w/pea gravel; plowzone	10YR 3/2	-
	2	7-14cm	silty loam w/medium gravel; E-horizon	10YR 4/4	metal*; flora*; inorganic*
	3	14-68cm	clayey sand w/large gravel; B-horizon	10 YR 4/4	-
	4	68-85cm	sand w/large gravel; C-horizon	7.5YR 4/4	-
52	1	0-15cm	sandy loam; A-horizon	10YR 3/2	building material
	2	15-70cm	clayey sand; displaced soil	10YR 5/3.5	building material
	3	70-110cm	saturated sand w/gravel; C-horizon	10YR 6/4	-
53	1	0-10cm	silty sand	10YR 3/4	-
	2	10-40cm	course sand w/pea gravel	10YR 5/6	-
54	1	0-10cm	wet sandy loam	10YR 3/2	-
	2	10-80cm	saturated silty sand w/gravel	10YR 5/4	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
55	1	0-12cm	silty sandy loam	10YR 3/3	glass*
	2	12-30cm	mottled sand w/gravel	10YR 4/4 7.5YR 5/6	-
	3	30-80cm	sand w/gravel	10YR 5/6	-
	4	80-88cm	sand w/limestone frags	10YR 6/6	-
56	1	0-10cm	silty loam; A-horizon	10YR 3/2	metal*
	2	10-64cm	clayey sand; road fill	10YR 5/3	metal*
	3	64-118cm	sand w/gravel; C-horizon	10YR 5/5	-
57	1	0-7cm	silty loam; A-horizon	10YR 2/2	metal*
	2	7-60cm	clayey silt; road fill	10YR 4/3	glass*; metal*
	3	60-80cm	clayey sand; C-horizon	10YR 4.5/6	-
58	1	0-15cm	sandy silty loam w/gravel	10YR 3/3	glass*; plastic*; asphalt*
	2	15-85cm	silty sand w/gravel	10YR 4/4	-
	3	85-90cm	sand w/gravel	10YR 4/6	-
59	1	0-8cm	silty loam; A-horizon	10YR 2/2	-
	2	8-80cm	clayey silt; road fill	10YR 4/3	metal
	3	80-110cm	clayey sand; C-horizon	10YR 4.5/6	-
60	1	0-10cm	clayey loam; A-horizon	10YR 3/2	metal*
	2	10-44cm	sandy clay; E-horizon/road fill	10YR 5/4	metal*
	3	44-96cm	clayey sand; B-horizon	10YR 5/5	-
61	1	0-10cm	sandy loam; plowzone	10YR 3/2	metal*
	2	10-30cm	clayey silt w/gravel; E-horizon	10YR 5/3	-
	3	30-72cm	mottled sand w/gravel; B-horizon	10YR 4/6 10YR 5/8	-
	4	72-90cm	coarse sand w/gravel; C-horizon	7.5YR 4/4	-
62	1	0-9cm	clayey loam; A-horizon	10YR 4/2	glass*
	2	9-48cm	silty clay; overbank wash	10YR 5/3.5	glass*
	3	48-115cm	clayey sand; B-horizon	10YR 5/5	-
	4	115-122cm	silty sandy clay; buried A-horizon	10YR 5/3	-
	5	122-144cm	sand; C-horizon	10YR 4/5	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
63	1	0-20cm	silty loam; plowzone	10YR 4/2	-
	2	20-55cm	mottled silty clay; historic slope wash	10YR 4/6 10YR 5/4	metal*
	3	55-155cm	mottled coarse sand w/silt; historic slope wash	10YR 5/4 10YR 4/6	-
	4	155-165cm	mottled silty sandy clay; buried A-horizon	10YR 6/8 10YR 7/1	-
	5	165-175cm	mottled sand; C-horizon	5YR 4/6 10YR 7/8	-
64	1	0-5cm	silty loam; A-horizon	10YR 3/2	-
	2	5-27cm	sandy silty loam; A-horizone	10YR 4.5/3	-
	3	27-53cm	silty sand; historic overbank wash	10YR 5/4	-
	4	53-75cm	silty sand; overbank wash	10YR 5/5	-
	5	75-105cm	silty sand w/mixed organics/carbon	10YR 5/3.5	-
	6	105-110cm	silty sand; buried A-horizon	10YR 4.5/3	-
	7	110-125cm	sand w/gravel; B-horizon	10YR 6/5	-
65	1	0-29cm	loam	10YR 3/2	-
	2	29-59cm	sandy loam	10YR 5/4	-
	3	59-69cm	sandy clay	10YR 5/6	-
66	1	0-35cm	loam	10YR 3/2	-
	2	35-66cm	sandy loam	10YR 5/4	-
	3	66-78cm	sandy clay	10YR 5/6	-
67	1	0-20cm	loam; plowzone	10YR 3/2	-
	2	20-47cm	sandy clay; B-horizon	10YR 5/6	-
	3	47-59cm	medium sand w/pea gravel; C-horizon	7.5YR 5/6	-
68	1	0-19cm	loam; plowzone	10YR 3/2	-
	2	19-61cm	sandy clay; B-horizon	10YR 5/6	-
	3	61-82cm	medium sand w/pea gravel; C-horizon	7.5YR 5/6	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
69	1	0-9cm	sandy silt; A-horizon	10YR 4/2	building material; metal
	2	9-19cm	sandy clay; A-horizon	10YR 5/3	glass; historic ceramic
	3	19-48cm	sand w/gravel; B-horizon	10YR 5/5	glass; building material; fauna
	4	48-75cm	silty sand; C-horizon	10YR 4/4	-
	5	75-94cm	sand; C-horizon	10YR 5/7	-
70	1	0-7cm	silty loam	10YR 4/4	glass; metal
	2	7-20cm	silty sand	10YR 5/4	glass
	3	20-74cm	sandy clay	10YR 4/6	-
	4	74-92cm	sand	7.5YR 5/8 7.5YR 4/6	-
71	1	0-13cm	silty sand	10YR 4/2	glass; building material
	2	13-44cm	silty sand	10YR 3/4	historic ceramics; building materials; metal
	3	44-120cm	sand	7.5YR 3/4	historic ceramics; glass; metal; fauna
	4	120-190cm	mottled silty sand	5Y 2.5/2 5Y 4/1; 10YR 6/6	glass*; building material*
72	1	0-5cm	sandy silt; A-horizon	10YR 4/3	-
	2	5-30cm	silt w/rubble; fill	10YR 4/2	energy; glass; metal; bldg. materials
73	1	0-25cm	silty sand; fill	10YR 3/4	glass*; building materials*
	2	25-63cm	clayey sand; fill	7.5YR 3/4	glass*; building material
	3	63-137cm	sand; (gley)	5Y 4/1	-
74	1	0-15cm	sandy silt; A-horizon	10YR 4/3	glass*; building materials*
	2	15-50cm	sandy silt; A-horizon	10YR 3/2	glass*; building materials*; building material; metal
75	1	0-18cm	silty sand w/gravel; road bed	10YR 4/3	glass*; asphalt*
	2	18-58cm	sand w/gravel; C-horizon	10YR 5/5	-
	3	58-65cm	sand; C-horizon	7.5YR 5/5	-
76	1	0-17cm	silty sand w/gravel; road bed	10YR 4/3	asphalt*
	2	17-55cm	sand w/gravel; C-horizon	10YR 5/5	building material*
	3	55-80cm	sand; C-horizon	7.5YR 5/5	-
	4	80-84cm	sand; C-horizon	7.5YR 3/3	-

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: SHOVEL TESTS

ST #	Layer #	Depth From to	Soil Description	Munsell Color	Cultural Materials
77	1	0-15cm	silty sand w/gravel; road bed	10YR 4/3	building materials*
	2	15-43cm	sand w/gravel	10YR 5/5	-
78	1	0-13cm	sandy silt	10YR 3/3	glass; building material; metal
	2	13-22cm	sandy silt w/gravel	10YR 4/3	glass
	3	22-48cm	sandy silt w/carbon	10YR 5/4	-
	4	48-65cm	clayey sand	10YR 4.5/6	-
* Discarded in field					

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING: EXCAVATION UNITS

Unit	Context	Soil Description/Interpretation	Munsell Color	Cultural Materials
1	1	sandy silt	10YR 4/2	building materials, ceramics, glass, metal
	2	sandy clay	10YR 5/4	-
	5	silty clay	10YR 4/6	building materials, glass, metal, organics
	6	mill wall	-	-
	10	alluvial deposit	10YR 5/1	-
2	1	sandy silt	10YR 4/3	building materials, ceramics, glass, metal, organics
	3	silty sand	10YR 3/6	building materials*, glass**
	4	mottled sandy silt with gravel	10YR 3/2 10YR 3/1	building materials, ceramics, glass
	6	mill wall	-	-
	8	mill wall	-	-
	10	alluvial deposit	10YR 5/1	-
* Discarded in field ** Discarded in lab				

APPENDIX B

ARTIFACT INVENTORY

APPENDIX B
ARTIFACT INVENTORY

Shovel Test 4
Surface Collection
LITHICS
Quartz

1		*Debitage*
		Cortex: partially cortical Size Class: 2 cm

Total Artifacts in Context: 1

Context: 2
LITHICS
Quartz

1		*Debitage*
		clear
		Cortex: non-cortical Size Class: 2 cm
1	frag	*Thermally Altered Rock*
		Cortex: partially cortical
		Weight: 22.00gm

Total Artifacts in Context: 2

Total Artifacts in Unit: 3

Shovel Test 5
Context: 2
CERAMICS
Ironstone

1	sherd	*Hollowware*
		undecorated

LITHICS
Jasper

1		*Debitage*
		brown
		Cortex: non-cortical Size Class: 2 cm

Total Artifacts in Context: 2

Context: 4
LITHICS
Jasper

1		*Debitage*
		reddish brown
		Cortex: partially cortical Size Class: 2 cm

Quartz

1		*Debitage* clear Cortex: partially cortical Size Class: 3 cm
1	frag	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 40.00gm

Total Artifacts in Context: 3

Total Artifacts in Unit: 5

Shovel Test 6
Surface Collection

CERAMICS

Ironstone

1	sherd	*Indeterminate* one surface missing, opposite surface undecorated

Redware

1	sherd	*Indeterminate* glazed due to heat

GLASS

Vessel

1	frag	*Indeterminate* milk glass, molded indeterminate decoration, possible vase

LITHICS

Ironstone

1		*Debitage* Cortex: partially cortical Size Class: 2 cm

Jasper

1		*Debitage* reddish brown Cortex: partially cortical Size Class: 2 cm
4		*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 186.00gm

Quartz

1		*Debitage* Cortex: partially cortical Size Class: 4 cm
1		*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 3.00gm

Quartzite

2		*Thermally Altered Rock* reddened Cortex: non-cortical Weight: 42.00gm
5		*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 322.00gm

Total Artifacts in Context: 18

Context: 1

CERAMICS

Ironstone

1	sherd	*Flatware* cavetto/marly/rim sherd, interior exhibits molded notched ridge decoration, exterior undecorated Diameter: 10.00in

LITHICS

Jasper

1	frag	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 94.00gm

Quartzite

2	frags	*Thermally Altered Rock* one reddened Cortex: non-cortical Weight: 65.00gm
1	frag	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 392.00gm

Total Artifacts in Context: 5

Context: 2

LITHICS

Chert

1		*Debitage* black Cortex: partially cortical Size Class: 3 cm

Jasper

1		*Debitage* yellow/brown Cortex: non-cortical Size Class: 1 cm
1	frag	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 8.00gm

Quartz

1		*Debitage* Cortex: non-cortical Size Class: 2 cm
1		*Debitage* Cortex: non-cortical Size Class: 3 cm

Total Artifacts in Context: 5

Total Artifacts in Unit: 28

Shovel Test 7
Surface Collection

CERAMICS

Redware

1	sherd	*Indeterminate* interior surface missing, exterior exhibits brown manganese lead glaze, exhibits molded bead decoration

LITHICS

Jasper

2	frags	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 3.00gm

Quartz

1	frag	*Thermally Altered Rock* reddened Cortex: non-cortical Weight: 25.00gm
2	frags	*Thermally Altered Rock* reddened Cortex: non-cortical Weight: 15.00gm

Quartzite

2	frags	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 460.00gm

Shovel Test 7
Surface Collection
LITHICS
Quartzite
1 frag *Thermally Altered Rock*
reddened
Cortex: non-cortical
Weight: 43.00gm

Total Artifacts in Context: 9

Context: 1
LITHICS
Quartzite
1 frag *Thermally Altered Rock*
reddened
Cortex: partially cortical
Weight: 7.00gm

Total Artifacts in Context: 1

Context: 2
BUILDING MATERIALS
Iron
2 frags *Nail*
cut, machine formed head, heavily corroded
LITHICS
Quartz
1 *Debitage*
Cortex: partially cortical Size Class: 2 cm
Quartzite
2 *Debitage*
reddened
Cortex: partially cortical Size Class: 2 cm

Total Artifacts in Context: 5

Total Artifacts in Unit: 15

Shovel Test 9
Context: 2

BUILDING MATERIALS			
Iron			
	1		*Nail*
			cut, machine formed head, corroded
			Length: 2.00in
METAL			
Iron			
	1		*Hardware*
			loop, function unknown, heavily corroded

Total Artifacts in Context: 2

Context: 3

LITHICS			
Chert			
	1		*Debitage*
			black, reddened
			Cortex: non-cortical Size Class: 1 cm
Quartz			
	1		*Debitage*
			clear
			Cortex: non-cortical Size Class: 2 cm

Total Artifacts in Context: 2

Total Artifacts in Unit: 4

Shovel Test 10
Context: 1

CERAMICS			
Porcelain			
	1	sherd	*Hollowware*
			body/rim sherd, undecorated

Total Artifacts in Context: 1

Total Artifacts in Unit: 1

Shovel Test 11
Surface Collection
LITHICS
Chert

1		*Core*	
		black, exhibits several flakes removed	
		Cortex: partially cortical	
		Length: 62.00cm	Width: 45.00cm	Thickness: 44.00cm
		Weight: 150.00gm	

Quartzite

2	frags	*Thermally Altered Rock*	
		reddened	
		Cortex: partially cortical	
		Weight: 21.00gm	

Total Artifacts in Context: 3

Context: 3
BUILDING MATERIALS
Iron

2	frags	*Nail*	
		cut, indeterminate head, heavily corroded	

GLASS
Vessel

1	frag	*Tumbler*	
		curved, clear, exhibits molded annular decoration	

Total Artifacts in Context: 3

Total Artifacts in Unit: 6

Shovel Test 14
Context: 1
BUILDING MATERIALS
Brick

2	frags	*Indeterminate*	
		orange	
		Weight: 4.00gm	

GLASS
Vessel

1	frag	*Bottle*	
		curved, clear	

LITHICS
Quartz

1	frag	*Thermally Altered Rock* Cortex: partially cortical Weight: 48.00gm

Total Artifacts in Context: 4

Total Artifacts in Unit: 4

Shovel Test 17
Context: 1
CERAMICS
Whiteware

1	sherd	*Indeterminate* undecorated

LITHICS
Quartzite

1	frag	*Thermally Altered Rock* reddened Cortex: partially cortical Weight: 108.00gm

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 25
Context: 2
LITHICS
Quartz

1	frag	*Debitage* Cortex: non-cortical Size Class: 4 cm

Total Artifacts in Context: 1

Total Artifacts in Unit: 1

Shovel Test 26
Context: 2
LITHICS
Quartz

1	frag	*Debitage*
		Cortex: non-cortical Size Class: 2 cm
1	frag	*Debitage*
		clear
		Cortex: non-cortical Size Class: 1 cm

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 30
Context: 2
CERAMICS
Redware

1	sherd	*Indeterminate*
		interior exhibits brown manganese lead glaze, exterior unglazed

LITHICS
Quartzite

1	frag	*Thermally Altered Rock*
		reddened
		Cortex: partially cortical
		Weight: 186.00gm

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 31
Context: 2
CERAMICS
Redware

1	sherd	*Indeterminate*
		interior exhibits brown manganese lead glaze, exterior unglazed

LITHICS
Chalcedony

1		*Debitage*
		black, translucent
		Cortex: fully cortical Size Class: 3 cm

METAL
Steel

1		*Hardware* bearing ring, corroded Diameter: 0.75in

Total Artifacts in Context: 3

Total Artifacts in Unit: 3

Shovel Test 32
Context: 2
CERAMICS
Whiteware

1	sherd	*Indeterminate* undecorated

Total Artifacts in Context: 1

Total Artifacts in Unit: 1

Shovel Test 33
Context: 1
BUILDING MATERIALS
Brick

1	frag	*Indeterminate* red, corner fragment Weight: 104.00gm

CERAMICS
Whiteware

1	shered	*Indeterminate* one surface exhibits red transfer print floral decoration, opposite surface missing

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 35
Context: 2
CERAMICS
Whiteware

1	sherd	*Indeterminate* footring sherd, interior surface missing, exterior undecorated

GLASS
Vessel

1	frag	*Tumbler* curved, clear, exhibits pale purple tint, exhibits machine pressed fluting

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 36
Context: 2
CERAMICS
Ironstone

1	sherd	*Hollowware* footring sherd, interior surface missing, exterior undecorated
1	sherd	*Indeterminate* undecorated

Whiteware

1	sherd	*Hollowware* body/rim sherd, undecorated, exterior exhibits detached handle

Total Artifacts in Context: 3

Total Artifacts in Unit: 3

Shovel Test 41
Context: 1
CERAMICS
Redware

1	sherd	*Indeterminate* one surface missing, opposite surface unglazed

Stoneware

1	sherd	*Hollowware* body sherd, interior unglazed, exterior exhibits brown manganese lead glaze

GLASS
Vessel

1	frag	*Bottle* curved, pale olive
1	frag	*Indeterminate* curved, clear

Total Artifacts in Context: 4

Total Artifacts in Unit: 4

Shovel Test 42
Context: 1
BUILDING MATERIALS
Iron

1	frag	*Nail* indeterminate body, head missing, heavily corroded
3		*Nail* square bodied, indeterminate head, heavily corroded Length: 3.25in
1	frag	*Nail* square bodied, indeterminate head, heavily corroded

CERAMICS
Redware

1	sherd	*Indeterminate* interior/exterior exhibits brown manganese lead glaze

Whiteware

1	sherd	*Indeterminate* undecorated

Total Artifacts in Context: 7

Context: 2
LITHICS
Quartz

1		*Debitage* Cortex: non-cortical Size Class: 2 cm

Total Artifacts in Context: 1

Total Artifacts in Unit: 8

Shovel Test 44
Context: 2
BUILDING MATERIALS
Brick
1 frag *Indeterminate*
red
Weight: 3.00gm
FAUNA
Shell
1 frag *Oyster*
Weight: 5.00gm

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 45
Context: 1
CERAMICS
Creamware
1 sherd *Indeterminate*
one surface undecorated, opposite surface missing
Pearlware
1 sherd *Flatware*
rim sherd, one surface exhibits underglaze blue shell edge, opposite surface missing

Total Artifacts in Context: 2

Total Artifacts in Unit: 2

Shovel Test 46
Context: 2
BUILDING MATERIALS
Iron
1 *Nail*
cut, machine formed head, corroded
Length: 2.25in

Total Artifacts in Context: 1

Total Artifacts in Unit: 1

Shovel Test 48
Context: 2
BUILDING MATERIALS
Iron

1	frag	*Nail* indeterminate body, head missing, heavily corroded

Total Artifacts in Context: 1

Total Artifacts in Unit: 1

Shovel Test 52
Context: 1
BUILDING MATERIALS
Iron

1	frag	*Nail* indeterminate body, head missing, heavily corroded
1	frag	*Nail* indeterminate body/head, heavily corroded

Total Artifacts in Context: 2

Context: 2
BUILDING MATERIALS
Iron

2	frags	*Nail* indeterminate body, head missing, heavily corroded
1	frag	*Nail* indeterminate body/head, heavily corroded
1		*Nail* indeterminate body/head, heavily corroded Length: 2.00in

Total Artifacts in Context: 4

Total Artifacts in Unit: 6

Shovel Test 59
Context: 2
METAL
Steel

1		*Hardware* threaded bolt with nut, iron piece attached, one side exhibits etched letters "MADE IN U.S.A. T.R.- 16"", opposite side exhibits etched letters "Schrader pat off 888" Length: 2.88in Width: 0.38in

Total Artifacts in Context: 1

Total Artifacts in Unit: 1

Shovel Test 69
Context: 1
BUILDING MATERIALS
Iron

1	frag	*Nail* indeterminate body, head missing, heavily corroded
1	frag	*Nail* indeterminate body/head, heavily corroded

METAL
Iron

1		*Washer* square, cast iron, bolt hole diameter: .75 in. Length: 2.25in Width: 2.25in Thickness: 0.25in

Total Artifacts in Context: 3

Context: 2
CERAMICS
Whiteware

1	sherd	*Flatware* marly/rim sherd, undecorated

GLASS
Vessel

1	frag	*Bottle* curved, clear
1	frag	*Bottle* neck/finish fragment, pale purple, molded, hand applied double ring closure Diameter: 0.38in

Shovel Test 69
Context: 2
GLASS
Vessel

Total Artifacts in Context: 3

Context: 3
BUILDING MATERIALS
Iron

	4	frags	*Nail* indeterminate body, head missing, heavily corroded

FAUNA
Shell

	2	frags	*Oyster* Weight: 1.00gm

GLASS
Vessel

	1	frag	*Bottle/Jar* curved, aqua

Total Artifacts in Context: 7

Total Artifacts in Unit: 13

Shovel Test 70
Context: 1
BUILDING MATERIALS
Iron

	1	frag	*Nail* indeterminate body/head, heavily corroded
	1		*Nail* indeterminate body/head, heavily corroded Length: 3.00in

GLASS
Flat

	3	frags	*Windowlight* flat, pale aqua

METAL
Copper

1		*Wire* thin, corroded Length: 17.50in

Total Artifacts in Context: 6

Context: 2
GLASS
Vessel

2	frags	*Bottle* curved, pale aqua, patinated

Total Artifacts in Context: 2

Total Artifacts in Unit: 8

Shovel Test 71
Context: 1
BUILDING MATERIALS
Iron

1		*Nail* cut, machine formed head, corroded Length: 1.62in

GLASS
Indeterminate

1	frag	*Indeterminate* cobalt tint due to exposure to heat

Vessel

21	frags	*Bottle** curved, clear, modern
19	frags	*Bottle** curved, pale green, modern
1	frag	*Bottle** curved, amber, modern beer bottle

Total Artifacts in Context: 43

Context: 2
BUILDING MATERIALS
Iron

1	frag	*Nail* indeterminate body, head missing, heavily corroded

Shovel Test 71
Context: 2

BUILDING MATERIALS

Iron

1		*Nail* cut, machine formed head, heavily corroded Length: 2.38in

CERAMICS

Ironstone

1	sherd	*Flatware* rim sherd, undecorated

Stoneware

1	sherd	*Hollowware* buff bodied, interior exhibits Albany slip, exterior clear lead glaze, crock

METAL

Copper

1		*Washer* small, for rivet Diameter: 0.19in

Total Artifacts in Context: 5

Context: 3

BUILDING MATERIALS

Brick

1	frag	*Indeterminate* orange Weight: 5.00gm

Iron

1	frag	*Nail* indeterminate body, head missing, heavily corroded

CERAMICS

Ironstone

3	sherds	*Hollowware* full profile sherd, undecorated, bottom exhibits partial maker's mark "SEMI-", "WHITE GRANITE", "...LE & DAVIS." (DALE & DAVIS.), saucer, ca. 1880-1895 Diameter: 6.50in

FAUNA

Shell

3	frags	*Oyster* two hinged Weight: 142.00gm

GLASS
Flat
4 frags *Windowlight*
pale aqua
Vessel
1 frag *Bottle*
curved, clear
1 frag *Bottle*
neck/finish fragment, wide mouth external thread flat finish, probable milk bottle
Diameter: 1.38in
1 frag *Bottle*
rectangular base/body fragment, clear, three indented panels, chamfored corners, front panel exhibits embossed vertical letters "HAMELL&WIEDERSHEIM", "...ILADELPHIA", side panel "...ORING" (COLORING)
METAL
Iron
1 *Hardware*
possible bolt, heavily corroded
Length: 4.75in
1 *Hardware*
possible hasp, heavily corroded

Total Artifacts in Context: 17

Total Artifacts in Unit: 65

Shovel Test 72
Context: 2
BUILDING MATERIALS
Brick
4 frags *Indeterminate*
orange
Weight: 3.50gm
Iron
1 *Nail*
wire, heavily corroded
Length: 3.12in
1 *Nail*
indeterminate body/head, heavily corroded
Length: 2.62in
Mortar
1 frag *Indeterminate*
one surface blue and orange paint
Weight: 1.00gm

Shovel Test 72
Context: 2

BUILDING MATERIALS			
Mortar			
	2	frags	*Indeterminate**
			Weight: 18.00gm
ENERGY			
Combustible			
	4	frags	*Coal**
			Weight: 28.00gm
GLASS			
Flat			
	2	frags	*Windowlight*
			cobalt color due to exposure to heat
Indeterminate			
	2	frags	*Indeterminate*
			cobalt color due to exposure to heat
	5	frags	*Indeterminate*
			cobalt, one surface burnt, opposite surface orange paint or plastic
Vessel			
	1	frag	*Bottle**
			curved, clear, modern Pepsi bottle
METAL			
Lead			
	3	frags	*Indeterminate*
			irregular shaped
			Weight: 13.50gm

Total Artifacts in Context: 26

Total Artifacts in Unit: 26

Shovel Test 74
Context: 2

BUILDING MATERIALS			
Iron			
	1		*Nail*
			wire, heavily corroded
			Length: 2.62in
	1	frag	*Nail*
			indeterminate body/head, heavily corroded
	2	frags	*Nail*
			indeterminate body, head missing, heavily corroded

METAL
Iron

1	frag	*Hardware* metal strip, function unknown, heavily corroded Length: 3.75in
1	frag	*Hardware* cast iron slab with lip, brass bolt in middle, function unknown, heavily corroded, probably related to mill
1		*Nut* hex nut for 1/2 inch bolt, heavily corroded Diameter: 0.50in

Total Artifacts in Context: 7

Total Artifacts in Unit: 7

Shovel Test 78
Context: 1
BUILDING MATERIALS
Iron

1		*Nail* wire, heavily corroded Length: 2.62in

GLASS
Vessel

2	frags	*Bottle* curved, clear

METAL
Iron

1	frag	*Indeterminate* flat irregular fragment, function unknown, heavily corroded

Total Artifacts in Context: 4

Context: 2
GLASS
Vessel

2	frags	*Bottle* curved, clear

Shovel Test 78
Context: 2
GLASS
Vessel

1	frag	*Bottle/Jar* curved, pale aqua

Total Artifacts in Context: 3

Total Artifacts in Unit: 7

Excavation Unit 1
Context: 1
BUILDING MATERIALS
Brick

3	frags	*Indeterminate** orange Weight: 8.00gm

Iron

4	frags	*Nail* indeterminate body/head, heavily corroded, door nails

CERAMICS
Stoneware

1	sherd	*Hollowware* base/body sherd, buff bodied, interior exhibits Albany slip, exterior clear lead glaze Diameter: 6.75in

Whiteware

1	sherd	*Flatware* cavetto/marly sherd, interior exhibits blue underglaze transfer print decoration, exterior undecorated

GLASS
Flat

6	frags	*Windowlight* pale aqua

Vessel

8	frags	*Bottle* shoulder/neck/finish fragment, clear, rounded shoulder, restricted neck, hand applied blob top, eight mend as one Diameter: 0.62in
1	frag	*Bottle* cylindrical base fragment, clear, exhibits pale purple tint, exhibits shallow depression

METAL
Copper
1 *Rivet*
corroded
Diameter: 0.50in
Iron
1 frag *Bolt*
heavily corroded
1 *Hardware*
threaded J-hook, corroded
Length: 5.00in
Diameter: 0.44in
1 frag *Hardware*
wheel spoke, heavily corroded
Width: 1.62in Thickness: 0.88in

Total Artifacts in Context: 28

Context: 5
BUILDING MATERIALS
Wood
3 frags *Indeterminate*
CERAMICS
Redware
1 sherd *Indeterminate*
interior brown manganese lead glaze, exterior surface missing
GLASS
Flat
3 frags *Windowlight*
pale aqua
1 frag *Windowlight*
pale aqua, patinated
Vessel
1 frag *Bottle*
curved, pale aqua, patinated
3 frags *Bottle/Jar*
curved, clear
METAL
Iron
1 frag *Hardware*
long rounded tool, curved at one end
Length: 6.50in Thickness: 0.25in
1 *Hardware*
handle, heavily corroded

Excavation Unit 1
Context: 5

METAL

Iron

1		*Hardware* handle for cast-iron tool, heavily corroded Length: 7.00in
1	frag	*Hardware* rounded pin, heavily corroded Diameter: 0.50in
1	frag	*Hardware* pin, heavily corroded
1	frag	*Hardware* strap, heavily corroded Width: 1.25in Thickness: 0.12in

ORGANIC

Leather

1	frag	*Belt/Strap* function unknown, deteriorated

Total Artifacts in Context: 19

Total Artifacts in Unit: 47

Excavation Unit 2
Context: 1

BUILDING MATERIALS

Iron

2		*Nail* indeterminate body/head, heavily corroded Length: 3.00in
1	frag	*Nail* square bodied, head missing, heavily corroded
1	frag	*Nail* square bodied, indeterminate head, heavily corroded

Stoneware

5	sherds	*Pipe* interior/exterior burnt, interior diameter twelve inches, two mend as one Thickness: 0.75in

CERAMICS

Redware

1	sherd	*Flatware* interior exhibits molded brown manganese lead glaze annular decoration, exterior brown manganese lead glaze

Excavation Unit 2
Context: 1

CERAMICS

Redware

	1	sherd	*Indeterminate* refined, two surfaces unglazed, one surface missing

Stoneware

	1	sherd	*Hollowware* base/body sherd, buff bodied, interior exhibits Albany slip, exterior clear lead glaze, crock Diameter: 6.75in
	2	sherds	*Hollowware* buff bodied, interior exhibits Albany slip, exterior clear lead glaze, crock

GLASS

Flat

	4	frags	*Windowlight* pale aqua

Vessel

	1	frag	*Bottle* curved, amber, exhibits molded annular decoration
	2	frags	*Bottle* curved, amber
	1	frag	*Bottle** cylindrical base fragment, clear, exhibits embossed letters "NOT TO BE REFILLED", modern
	5	frags	*Bottle* curved, clear

METAL

Copper

	1		*Rivet* corroded Diameter: 0.50in

Iron

	2	frags	*Hardware* thin strap fragments, heavily corroded Thickness: 0.12in
	1	frag	*Hardware* sheet metal, heavily corroded Thickness: 0.31in
	1	frag	*Hardware* cast iron drive pulley
	5	frags	*Hardware* large wheel fragments, two with attached spokes Thickness: 0.38in

Excavation Unit 2
Context: 1

METAL			
Iron			
	1	frag	*Hardware* heavy metal fragment, two stove bolts attached, function unknown Width: 2.62in Thickness: 0.44in
	1		*Hardware* large washer, corroded, interior diameter one inch Diameter: 3.50in
ORGANIC			
Leather			
	1	frag	*Indeterminate* circular fragment, burnt, function unknown

Total Artifacts in Context: 40

Context: 4

BUILDING MATERIALS			
Stoneware			
	1	sherd	*Pipe* body/rim sherd, interior/exterior burnt, flat rim
Wood			
	2	frags	*Indeterminate* burnt
CERAMICS			
Porcelain			
	1	sherd	*Hollowware* undecorated, insulator
Redware			
	1	sherd	*Drain Tile* base/body sherd, unglazed
GLASS			
Vessel			
	2	frags	*Bottle* curved, olive
	1	frag	*Indeterminate* curved, clear, melted

Total Artifacts in Context: 8

Total Artifacts in Unit: 48

Excavation Unit 2
Context: 4
GLASS
Vessel

TOTAL ARTIFACTS: 330

* Item Discarded in Lab